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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,229	11/21/2001	Yi-Jen Cheng	U 013725-5	1880

7590 06/05/2003  
Ladas & Parry  
26 West 61st Street  
New York, NY 10023

EXAMINER

LAU, TUNG S

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/990,229

Applicant(s)

CHENG, YI-JEN

Examiner

Tung S Lau

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lubin (U.S. Patent 5,909,516).

Regarding claim 1:

Lubin discloses a method for testing eye diagram characteristics, comprising the following steps, sending a precondition from a mainframe to a chip under test (fig.2), and reading GLPF signals from the chip under test (Col. 4, Lines 30-44) ; digitalizing and normalizing the GLPF signals (fig. 1, unit 100); reconstructing an eye diagram according to the normalized GLPF signals (fig. 3, 4) ; analyzing an error between parameters of the eye diagram and a predefined specification (fig. 3,4); and deciding if the chip under test is valid according to the error analysis (Col. 1, Lines 15-36, Col. 1-2, Lines 60-9).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2863

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubin (U.S. Patent 5,909,516) in view of Yamazaki (U.S. Patent Application 2002/0011835).

Regarding claims 4 and 5:

Lubin discloses an apparatus for testing eye diagram characteristics, comprising a mainframe (fig. 1), including (a) a digitizer for capturing GLPF signals of a chip under test, and digitalizing and normalizing the GLPF signals (fig. 1, unit 110, fig. 3, 4, Col. 4, Lines 30-44); (b) an eye diagram reconstruction means for overlapping a series s of GLPF signals into a cycle period of the eye diagram (fig. 3, 4); and (c)an error comparison means for computing if parameter errors of the eye diagram are in an allowable range (Col. 1, Lines 15-37).

Lubin does not disclose the use of a mechanical arm connected to the mainframe for carrying the chip under test and test plate on the arm for carrying the chip.

Yamazaki disclose the use of a mechanical arm connected to the mainframe for carrying the chip under test and test plate on the arm for carrying the chip (fig. 1, unit 23, page 1, section 0007), in order to deliver the test target to the test area (fig. 1, unit 23, 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lubin to have the use of a mechanical arm connected to the mainframe for carrying the chip under test taught by Yamazaki in order to in order to deliver the test target to the test area (fig. 1, unit 23, 4).

b. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubin (U.S. Patent 5,909,516) in view of Yamazaki (U.S. Patent Application 2002/0011835) and Schreiber et al. (U.S. Patent 4,268,861).

Lubin and Yamazaki disclose a method including the subject matter discussed above except the use of width of the eye diagram, height, cross ratio of the eye diagram. Schreiber disclose the use of width of the eye diagram, height, cross ratio of the eye diagram (fig. 2), in order to allows the coder to be optimized for better edge reproduction (Col. 3, Lines 3-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lubin and Yamazaki to have the use of width of the eye diagram, height, cross ratio of the eye diagram taught by Schreiber in order to allows the coder to be optimized for better edge reproduction (Col. 3, Lines 3-11).

### ***Claim Objections***

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3. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach computing positions of zero-crossing points according to the average value; and utilizing a transmission rate of the GLPF signals as a cycle time of the eye diagram and overlapping a series of GLPF signals into a cycle period of the eye diagram.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 703-305-3309.

The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

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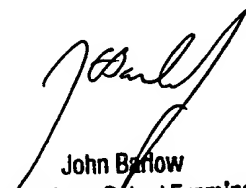
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TC2800 RightFAX Telephone Numbers : TC2800 Official Before-Final RightFAX - (703) 872-9318, TC2800 Official After-Final RightFAX - (703) 872-9319

TC2800 Customer Service RightFAX - (703) 872-9317

TL

May 22, 2003

  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800